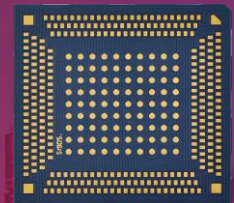


Quectel RG502Q-EA

IoT/M2M-optimized

5G Sub-6 GHz LGA Module



RG502Q-EA-AA

Release Notes

5G Module Series

Rev. RG502Q-EA-AA_Firmware_Release_Notes_V1301_01.001.01.001

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1. Release Content

This document provides the Release Notes for RG502Q-EA-AA. The current release includes the firmware package.

Package	Version
Firmware	RG502QEAAAR13A01M4G_01.001.01.001

2. Matters Needing Attention

SN	Item
[1]	SA MBIM dialing is supported in Windows 10 1903 and above versions.
[2]	The VoNR are not supported.
[3]	It is necessary to keep the power supply connected when upgrading the firmware version.

3. Release History

3.1. Firmware Release History

Firmware Version	Description
RG502QEAAAR13A01M4G_01.001.01.001	Mass production

3.2. New Features

RG502QEAAAR13A01M4G_01.001.01.001	
Item	Brief Description
DFOTA	Added the function of reporting DFOTA upgrade progress on the Debug port.
NETWORK	Added AT+QNWCFG="clr_rplmn" to delete the RPLMN information in the SIM card.
GENERAL	Added AT+QNWCFG="rrc_state" to query the RRC state.
GENERAL	Added AT+QCFG="clat" to control clat_enabled.

3.3. Improved Features

RG502QEAAAR13A01M4G_01.001.01.001	
Item	Brief Description
NETWORK	Solved the problem that the MCC and MNC returned by AT+QNETINFO="servingcell" were invalid values.
NETWORK	Solved the problem that AT+QENG="servingcell" returned an invalid <ARFCN> under NSA.
NETWORK	Optimized AT+QSRP by returning -32768 to indicate an invalid value.
NETWORK	Optimized the judgment of AT+COPS on the ENDC registration result.
NETWORK	Solved the problem that AT+QSCAN=3,1 did not display 5G cell information in some cases.

NETWORK	Displayed AT+QSCAN to support querying LTE cell bandwidth information and 5G cell SSB SCS information.
NETWORK	Solved the problem that the frequency band information of "TDD NR5G" and "FDD NR5G" returned by AT+QNWINFO was inconsistent with the actual information.
GENERAL	Optimized the command set of AT+QETH to support Ethernet PHY attribute configurations of PCIe interface.
GENERAL	Solved the problem that <stat> of the currently registered operator in the returned result of AT+COPS=? was incorrect when the module was registered on 5G SA.
GENERAL	Solved the problem that the return value of AT+QTEMP was invalid.
GENERAL	Solved the problem that the module could not respond correctly to C-APDU requests.

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3.4. Known Issues

Item	Bug Description
/	/

NOTE

Verification Environment is shown below. For more details, please contact Quectel technical support.

For Windows,

USB Driver: Quectel_LTE&5G_Windows_USB_Driver_V2.2.4.zip

Qflash Tool: QFlash_V5.3

For Linux,

QMI_WWAN Driver: Quectel_Linux&Android_QMI_WWAN_Driver_V1.2.0.23.zip

GobiNet Driver: Quectel_Linux&Android_GobiNet_Driver_V1.6.2.15.zip

PCIE Driver: Quectel_Linux_PCIE_MHI_Driver_V1.3.0.17.zip

QFirehose Tool: Quectel_LTE&5G_QFirehose_Linux&Android_V1.4.7.zip

Quectel-CM Tool: Quectel_QConnectManager_Linux_V1.6.0.26.zip

QLog Tool: Quectel_QLog_Linux&Android_V1.4.17.zip

For IPQ,

IPQ Driver: Quectel_Linux_PCIE_MHI_Driver_V1.3.0.18.zip

Qualcomm IPQ driver: spf11.3

4. Functions List

Category	Item	Supported Version(Since)	Note
Basic Function	SMS	RG502QEAAAR13A01M4G _01.001.01.001	/
	Voice Call	RG502QEAAAR13A01M4G _01.001.01.001	/
	VoLTE	RG502QEAAAR13A01M4G _01.001.01.001	/
	NETWORK	RG502QEAAAR13A01M4G _01.001.01.001	/
File Function	UFS	RG502QEAAAR13A01M4G _01.001.01.001	/
	RAM	RG502QEAAAR13A01M4G _01.001.01.001	/
Protocol Function	NITZ	RG502QEAAAR13A01M4G _01.001.01.001	/
	QMI	RG502QEAAAR13A01M4G _01.001.01.001	/
Interface Function	USB	RG502QEAAAR13A01M4G _01.001.01.001	/
	MBIM	RG502QEAAAR13A01M4G _01.001.01.001	/
	RmNet	RG502QEAAAR13A01M4G _01.001.01.001	/
	PCIE	RG502QEAAAR13A01M4G _01.001.01.001	/
	ECM	RG502QEAAAR13A01M4G _01.001.01.001	/
	RGMII	RG502QEAAAR13A01M4G _01.001.01.001	/
	AGPS	RG502QEAAAR13A01M4G _01.001.01.001	/
Upgrade Function	DFOTA	RG502QEAAAR13A01M4G _01.001.01.001	/
Audio Function	Slic	RG502QEAAAR13A01M4G _01.001.01.001	/
	Audio	RG502QEAAAR13A01M4G _01.001.01.001	/
	DTMF	RG502QEAAAR13A01M4G	/

		_01.001.01.001	
SIM Function	DSSS	RG502QEAAAR13A01M4G _01.001.01.001	/
	(U)SIM Detection	RG502QEAAAR13A01M4G _01.001.01.001	/
Special Function	RF RX FTM	RG502QEAAAR13A01M4G _01.001.01.001	/
	RF TX FTM	RG502QEAAAR13A01M4G _01.001.01.001	/
	LowPower	RG502QEAAAR13A01M4G _01.001.01.001	/
	Thermal Mitigation	RG502QEAAAR13A01M4G _01.001.01.001	/
5G Function	5G	RG502QEAAAR13A01M4G _01.001.01.001	/

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About Quectel

Quectel Wireless Solutions is the leading global supplier of cellular and GNSS modules, with a broad product portfolio covering the most recent wireless technologies of 5G, LTE/LTE-A, NB-IoT/LTE-M, UMTS/HSPA(+), GSM/GPRS and GNSS. As a professional IoT (Internet of Things) technology developer and cellular module supplier, Quectel is able to provide one-stop services for IoT cellular modules. Quectel products have been widely applied in IoT/M2M fields including smart payment, telematics and transport, smart energy, smart cities, security, wireless gateways, industry, healthcare, agriculture, and environment monitoring.

